

May 19, 2002

MEMORANDUM
02-05

TO: District Directors
District Construction Engineers
District Materials and Tests Engineers
Toll Road Operations Engineer
Area Engineers
Project Engineers/Supervisors

FROM: Timothy D. Bertram, Chief
Contracts and Construction Division

RE: 2002 SMA Specifications

There have been several issues relating to specifications for SMA mixtures being placed in 2002. The following clarifications shall be used for SMA mixtures this year:

1. The consensus was that the requirement for Mineral Filler to come from a Category I Source be removed and that as long as the material is not plastic it may be incorporated into the SMA. The Specification already requires that the Mineral Filler be tested for PI; and therefore, the only change to be made to existing contracts is to remove the requirement that the material come from a Category I Source. This would include any cementitious "filler" material such as Portland Cement.
2. Blended Fine Aggregates composed of pond sediment material from Category II may be submitted as a QA product and used in SMA mixtures as long as the blended material is not plastic. The PI test must be performed. The Department must verify the final blend that is actually being used during production. If the material is plastic it cannot be incorporated into the SMA.
3. When testing material to determine if it is plastic or non-plastic the District Material & Tests Engineers stated that they have the necessary equipment to run the PI test. The Materials & Tests Division can perform this testing if needed.
4. All Coarse Aggregate must meet the AGG.02 requirements stating that the CAA shall be 100% one-face crushed and 90% two-faced crushed.
5. Several questions arose concerning the Classification of aggregates table in AGG 02 of the SMA specification. Specifically the concern about what the differences were between "Other Deleterious", "Additional Requirements Deleterious", "Non-Slag Debris", "Structurally Weak", and "Soft Particles". To clarify this the Table (b) Classification of Aggregates should be revised as shown below:

(b) Classification of Aggregates.

Characteristic Class	AS
Quality Requirements	
Los Angeles Abrasion, %, Max.	30.0
Sodium Sulfate Soundness, %, Max. (Note 2)	12.0
Brine Freeze-and-Thaw Soundness, % Max. (Note 3)	30
Absorption, %, Max. (Note 3)	5.0
Additional Requirements Deleterious, %, Max.	4.0
Non-Slag (Debris), Max %	2.0
Structurally Weak, Max %	2.0
Soft Particles, (Lime Agglomerates), Max %	2.0
Other Deleterious, Max %	4.0

- NOTES:
1. Aggregates may, at the option of the Engineer, be subjected to 50 cycles of freezing and thawing in accordance with AASHTO T 103, Procedure A, and may be accepted, provided they do not have a loss greater than specified for Sodium Sulfate Soundness.
 2. Absorption requirements apply only to aggregates used in portland cement concrete and HMA mixtures except they shall not apply to blast furnace slag. When crushed stone coarse aggregates from Category I sources consist of production from ledges whose absorption differ by more than two percentage points, the absorption test will be performed every three months on each size of material proposed for use in portland cement concrete or HMA mixtures. Materials having absorption values between 5.0 and 6.0 that pass AP testing may be used in portland cement concrete. If variations in absorption preclude satisfactory production of portland cement concrete or HMA mixtures, independent stockpiles of materials will be sampled, tested, and approved prior to use.
 3. Brine freeze-and-thaw soundness requirements are subject to the conditions stated in note 2.

TDB:pl